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# A new approach to oil-and-gas exploration

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*The executives behind the Cove Energy success story discuss the strategy driving their new venture, Discover Exploration, and offer advice to other exploration-and-production companies.*

Michael Blaha and John Craven cofounded Cove Energy, one of the most dramatic recent exploration success stories in the oil-and-gas sector. Cove started in 2009 as a £1 million shell company; a little more than three years later, Thailand's national oil company, PTT Exploration and Production, bought it for £1.2 billion. In the wake of that success, in 2012, Blaha and Craven started Discover Exploration, a privately owned oil-and-gas-exploration company with deepwater assets in the Comoros and New Zealand.

Before these entrepreneurial ventures, Blaha, executive chairman, spent almost 30 years with Shell, working all over the world, including Algeria, Iran, and Russia. Craven, the company's CEO, who has 40 years in the industry, founded and ran Petroceltic International, an exploration company. Alexander Mollinger, Discover's commercial director and a petroleum engineer with 10 years' experience, formerly worked at Cove and Shell.

In this interview with McKinsey's Namit Sharma, the three executives discuss their strategy, their view of the oil-and-gas sector—and why they think lightning can strike twice.

**McKinsey:** *Why did you decide to start Cove?*

**Michael Blaha:** John Craven and I met in 2008; we realized that international exploration-and-production (E&P) companies struggled with new-business development, specifically in exploration. So we came up with a simple strategy: build a small team to find high-quality exploration opportunities, add value, and then divest. We didn't want a five-story office filled with secretaries and bureaucracy. The idea was to keep it small and to leverage our knowledge and network.

In May 2009, we convinced a few institutional investors in London to invest £4 million, enough to keep us going. We found an opportunity to buy minority interests in exploration concessions in Kenya, Mozambique, and Tanzania from the Artumas Group.

When John looked at the 3-D seismic (the sound-wave technology that produces 3-D images of the subsurface) of Artumas's deepwater Mozambique concession, he immediately recognized the same geological features as the Jubilee field offshore Ghana, one of the largest oil fields in West Africa. He said we had to do this. It was a five-minute decision. We thought, "No guts, no glory: let's go for it."

**John Craven:** Still, the acquisition of the Artumas assets was risky. It was an unproven oil-and-gas frontier with a commitment to drill five expensive deepwater wells. In September 2009, we raised £42 million; we did two more rounds of financing in 2010, raising an additional £136 million. So at that point, we had the money, and serious assets.

A month later, we started drilling onshore in Mozambique; it was a failure. Then we went for the offshore concession. We were nervous. Off the coast of East Africa, most reservoirs are small and sliced up because of tectonic movements. We call it "sliced bread" because it looks exactly like that. So we decided to drill farther away from shore, into the deeper waters where the geology is less disturbed.

**Michael Blaha:** It was a nightmare. We had one problem after another. Then, one Sunday in February 2010, we hit the jackpot. The well drilled through a gas accumulation, known today as the giant Prosperidade field. That morning, I spent hours in my study looking at the live data on my laptop. It was a beautiful thing, like the birth of a child.

**Alexander Mollinger:** Mozambique's a black swan. Until that moment, the industry had dismissed East Africa as not having any serious hydrocarbon resources, and Mozambique ranked among the world's poorest countries. Today, the resources of Prosperidade and adjacent reservoirs are close to 130 trillion cubic feet, making it probably the biggest gas discovery worldwide of the last 20 years. It could transform Mozambique into one of the largest liquefied-natural-gas exporters, similar to Qatar and Australia, and offer long-term benefits to its people.

**McKinsey:** *It was only a little more than a year later you put Cove up for sale. What was your thinking?*

**John Craven:** We had always told our shareholders and joint-venture partners that our strategy was to come in early and then divest after a discovery. We didn't see any value in participating in the development or production of a field. We were a pure exploration company. The same applies today to Discover.

We decided to sell Cove in March 2011, but the sale didn't close until the third quarter of 2012. It always takes longer than you think. Our share of Prosperidade was only 8.5 percent, but the interest was phenomenal—I think we had the entire oil-and-gas industry in our data room. We went to Bangkok,

Hong Kong, Kuala Lumpur, Seoul, Singapore, and Tokyo, to meet the main players there and make sure there would be enough competitive tension.

Looking back, I don't think we could have sold Cove at a better moment.

**McKinsey:** *What were the most important factors in Cove's success?*

**Michael Blaha:** I would start with John's thorough knowledge of geology. He also has the ability to distill a complex story into a simple one—that worked particularly well with investors.

Next, we had excellent 3-D seismic. For example, our first well into Prosperidade was 6,000 meters long, but we found the different geological layers almost spot on. That's pretty extraordinary.

Another important point is that our Tanzanian asset had some production. That helped us raise money because investors knew they could not lose everything. By the second round of funding, we had a rock-solid investor base, including blue-chip investors. That gave us some peace; we knew that they believed in us. We were not acting like secondhand-car dealers. We told them exactly what the risks were. That created trust.

**Alexander Mollinger:** I think there were four critical factors. First, there was the expertise of our team. John was drilling wells before I was even born. Second, there was guts. There was this fantastic asset in Mozambique, owned by a company that could no longer afford it; many E&P companies liked it, but no one put money on the table until we did. Third, we were disciplined; we stuck to our strategy. We raised enough money so that we would not run out and could survive bad times, and we exited in time. Fourth, in exploration, you always need a bit of luck—and when it stares you in the face, seize it. We did.

**McKinsey:** *What would you have done differently?*

**Michael Blaha:** We learned about corporate governance the hard way. Early on, one of our nonexecutive board members tried to rally a group of shareholders to take control. It was unpleasant. It's essential to have a board of people who are aligned around your company objectives and business principles. If that's not the case, you have to clear them out as quickly as possible. There is a Dutch expression, "Soft doctors make stinky wounds." In other words, sometimes you have to take hard decisions or things will get worse.

**John Craven:** Selling Cove quickly turned into a bidding war. It was the first "nondistressed" corporate takeover in a while, and we got a lot of attention. Dealing with the regulatory load was difficult for both the bidders and us. We are convinced our shareholders lost some money because of this. After Cove, we said, "Not again."

**McKinsey:** *You sold Cove in 2012 and started Discover Exploration more or less immediately. Is Discover really Cove 2.0?*

**Michael Blaha:** Yes, in some ways. Discover ("DisCOVEr") has the same management team and modus operandi—we trust each other totally. The team surrounding John and myself was key to Cove's success. Since day one, chief financial officer Michael Nolan, who has more than 20 years' experience with natural-resource companies, has been instrumental in financial management and corporate governance. Corporate-development director Paul Griggs, who also has more than 20 years' experience in oil and gas and banking, played an essential role in commercial negotiations. In 2011, we brought in Alexander [Mollinger] to reinforce the team's technical and commercial expertise.

**John Craven:** Discover and Cove are similar. After Cove, however, we had to build a portfolio from scratch. We did retain one valuable asset—a solid reputation in the industry and financial markets. As a result, there was significant appetite from public and private investors, as well as from the E&P industry, to invest in Discover.

**McKinsey:** *How is Discover different?*

**Michael Blaha:** Cove was listed on the London Stock Exchange while Discover is funded by a large US private-equity firm, the Carlyle Group, which recently set up a new energy fund. We have become their exploration arm. Carlyle has a global footprint and network we can rely on.

If you look at Cove, the fact that it was public took lots of time and energy from us. With private equity, there are fewer investors. It's simpler. Sometimes public companies make funny portfolio decisions just to become more attractive to the market. That distracts them from real value creation. With our private-equity shareholder, we are one team, with one objective: to generate and return value to shareholders as soon as possible.

**John Craven:** The truth is that it's not a good time to be publicly funded. Since Mozambique, the world hasn't had any major discoveries, and few corporate deals are happening. The market seems to have lost faith in E&P companies,

especially the explorers. The share prices of many are very low. Raising money is tough; success is hardly rewarded; failure is severely punished. There's a big gap between how the public market and the industry value exploration assets.

**McKinsey:** *What can other oil-and-gas companies learn from Cove's experience?*

**Michael Blaha:** For the majors, maybe not so much. They shouldn't try to copy Cove; they would need to gather several organizations into one, and that wouldn't work. For them, it's easier to build long-term relationships with entities like Cove, and later pay a premium to acquire the discoveries. That's where we see ourselves—as a logical part of the E&P value chain.

**John Craven:** For smaller E&P companies, there are perhaps a few takeaways.

First, keep it simple. Keep your organization lean, nimble, and fit for purpose. Don't become a "lifestyle" company with huge overhead. Second, focus on what's really important: geology. Make sure the geology is attractive before looking at the commercial, legal, and financial dimensions of a deal. We too often see assets being acquired for the wrong reasons.

**McKinsey:** *What kinds of plays is Discover looking for?*

**Michael Blaha:** We're looking for good geology with sufficient upside. That rules out onshore because the resources are often smaller; there's not sufficient upside. For us, deep water is where the big opportunities are. While the technology is expensive, it is off the shelf. A 6,000-meter well in deep water costs $70 million to $100 million; there's not much deviation, and there are not a thousand ways to make it cheaper. So it's expensive, but predictable.

**John Craven:** Ten years ago, offshore Africa was largely virgin acreage. Today, most of it has been awarded, and getting a concession is increasingly competitive. We also see that many African governments are stepping up their petroleum taxes. That's why we are looking at other frontier regions, such as Asia and the Americas. There's still plenty to explore for.

**McKinsey:** *Both Cove and Discover concentrate on a small group of assets. Why do you do that, rather than spreading your risk among a bigger number?*

**Michael Blaha:** Our strategy is to divest before development. We want to create value, then get out and start again. So we have to be ready to be taken over. That's easier when there are just a few assets. It's also a matter of prioritizing. We don't want to waste time on small stuff that distracts us from the essential. Besides, I don't think having more assets reduces risk. People fall into the trap of building a "stamp collection" because there are cheap opportunities out there or because they are under pressure to spend their cash. But they don't realize that this is eating up their time and dilutes the one or two valuable assets that they may have. That's a risk, too.

**McKinsey:** *How do you make those choices?*

**Alexander Mollinger:** Let's look at our portfolio. Along with our joint-venture partner, we entered the Comoros in 2012, before anyone else, and acquired three deepwater concessions. In our industry, there's what we call "closeology"—proximity to an existing discovery is often an encouraging sign. Our Comorian assets are not far from our Prosperidade discovery in Mozambique. So for us, even though we didn't have much geological data, it was a no-brainer.

In New Zealand, where we just drilled two deepwater wells, it's slightly different. The quality of the 3-D seismic shot by the joint venture was excellent. We believed in the geology and in the significant upside of these two concessions. Also, our joint-venture partners are world-class companies. Those are the ingredients that we like.

**McKinsey:** *What are some of the important trends you see in exploration?*

**Michael Blaha:** Shale gas has had a noticeable impact, of course. Many US independents are divesting their international portfolio to focus on the US mainland.

Another trend is that E&P companies are increasingly under pressure from shareholders to show capital discipline. That means exploration managers have more budget restrictions and need to divest parts of their portfolio to avoid overspending.

Both trends offer opportunities to acquire stakes in assets that we like.

**John Craven:** The public-market sentiment toward E&P is poor; retail investors are particularly risk averse and many smaller E&P companies are trading close to or below their net cash. It's a buyer's market, where cash is king. That has whetted the appetite of private-equity funds to participate in the entire energy value chain, from upstream through midstream to downstream. We have seen numerous large funds emerge over the last year. The E&P sector is in serious need of a few major discoveries to restore confidence among retail investors.

**McKinsey:** *Africa can be a difficult place to do business, but in Mozambique it seems that you managed to operate and then divest relatively easily. How?*

**Michael Blaha:** When we told the Mozambican government of our intention to sell Cove, under the existing law, it could not tax the transaction. The energy minister surprised many by saying, "No, we're going to tax it." When that got out, our share price dropped 10 percent and the sales process froze. We had to find a solution. So we camped out in the capital, Maputo, and called the government every day to talk. We came to a settlement within four weeks and ended up paying the biggest tax bill ever in Mozambique: $176 million. And that was OK. Imagine: you come into a country, stay for two years, and make more than £1 billion. You cannot just walk away, even if—on paper—you have that right.

The larger point is that a deal has to be equitable for all parties. There's no point in making one that is too good for you; it will come back to bite you. The country will always remain the sovereign owner of its natural resources; we're merely helping to find these.

**Alexander Mollinger:** To build good relationships, the golden rules are to educate people, be honest, and always keep the authorities informed of your intentions. Never surprise them.

When we arrived in the Comoros, there was some misconception about what Discover would be doing. Many believed it was merely a matter of us drilling a well and cashing the oil revenues. So we wrote a basic guide to oil and gas, in French, and handed copies out. That helped. Today, people understand much better the levels of investment and the risks that we're taking. Managing expectations is important.

Then, we helped the authorities write their petroleum law. They didn't have the in-house knowledge. We could have tried to come up with something that was a much better deal for us in terms of royalties and taxes. But we didn't, which ended up being a good thing. The authorities went to the World Bank and another African government to get their opinions. They were told the law was fair and transparent. They saw we hadn't messed with them. That strengthened our relationship.

**McKinsey:** *Cove had a couple of assets and hit it big, and Discover has the same strategy. In a sense, aren't you betting that lightning will strike twice?*

**Michael Blaha:** Absolutely. And we're putting up the lightning rod extra high this time.

**Alexander Mollinger:** When you're drilling an exploration well, you've got a big chance of finding nothing and losing your investment and a small chance of hitting the jackpot. There's little in between. There are no cash flows, no dividends, no tangible asset values. It's fundamentally different from most industries.

Some compare it with placing a bet at the roulette table, but that's not exactly right. Technical expertise, for example, can turn the odds in your favor. It's a technology-driven business. In fact, most executives have an engineering or geoscience background. We don't speculate. Our decisions are based on fact. You need to be able to distinguish a good geological play from an average one.

There's also the matter of reputation and relationships. These will help you access off-market opportunities. Major E&P companies pick their joint-venture partners carefully. If you do not have an impeccable reputation, you're left to deal with the secondhand-car dealers of the business.

**John Craven:** It sounds risky, but this is what we do. We are focused on geology, and we know our core business. We tell our investors where we're going to drill, and we give them a cost and the likelihood of success. So they know what they're getting into.

This isn't a game for the faint of heart. But it's the most exciting game I know.

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